

# BUILD YOUR SKILLS

## POWER TOOLS

- There's no doubt that power tools take the hard work out of many DIY activities, helping even relatively unskilled people to achieve professional-looking results.
- The one power tool no home should be without is a power drill. The Wickes range offers a choice of hammer drills, plus pneumatic hammer drills and cordless drill/drivers.
- Sawing timber and boards is no sweat either, thanks to power saws. The two Wickes jigsaws cut timber to length and make light work of angled and curved cuts, while the circular saw zips through wood and man-made boards with ease. And if you want to cut metal or masonry, Wickes' angle grinder is the tool to choose.
- Sanding is another area where power saves time and effort. The Wickes range includes orbital, eccentric disc and detail sanders. All have a dust extraction facility.



## USING POWER DRILLS

### Fitting the drill bit

- Select the drill bit you want to use, and spin the chuck open so you can insert the bit in the jaws. Tighten it up again by hand, checking that the bit is held centrally between the jaws.
- If your drill has a keyed chuck, use the key to tighten it. Use all three key positions in turn, rather than just one, to ensure that the bit is securely held.
- If your drill has a keyless chuck, simply tighten it fully by hand. Then run the drill briefly so you can check by eye that the bit is centred in the jaws. [PIC 1]

### Drilling holes in wood and metal

- Use a twist drill bit for metal and for small holes in wood, and a flat wood bit for larger holes in wood. Make sure that the drill body is at right angles to the surface before you start drilling. Use a slow speed for drilling metal.
- Always clamp the workpiece to your bench before drilling holes. Otherwise it may spin round uncontrollably as you start the drill. If you're drilling through holes, clamp scrap wood beneath the workpiece and drill on into it to ensure the drill bit leaves a clean exit hole. [PIC 2]
- Mark the start point on sheet metal with a punch to prevent the bit from skating across the surface when you start drilling.

### Drilling holes in masonry

- Use a sharp masonry drill bit for making holes in brickwork, blockwork and concrete. Select a slow drilling speed and hammer action. Wear safety spectacles or goggles to keep drill dust out of your eyes.
- Hold the drill body at right angles to the surface and start drilling. Don't force the drill: it will simply overheat and blunt the drill bit. Withdraw the bit from the hole at intervals to help clear drill dust from the hole.
- If you're drilling into ceramic tiles, stick masking tape on the tile and mark the hole position on it. The tape stops the drill bit from skating across the glazed surface when you start drilling. [PIC 3]

## USING POWER TOOLS SAFELY

All tools are potentially dangerous unless they are used properly and with care, and power tools are no exception. Here are some tips to help you get the best from your power tools. But first there are a couple of general safety points to bear in mind.

Before using any power tool, check that its casing is intact and its flex and plug are in good condition. Don't wear loose clothing that could get caught up in moving parts, and tie long hair back.

Lastly, wear safety spectacles or goggles to protect your eyes, especially if working with metal or masonry, and add a dust mask if you're sanding or using a circular saw, especially with MDF which creates a lot of fine sawdust.

### Power saws

Because they have a fast-moving and exposed blade, power saws cause more accidents than any other power tool. Handle them with extra care, and always read the manufacturer's safety instructions before using the tool for the first time.

With jigsaws, unplug the saw before changing a blade, and make sure that the locking screw is fully tightened. Check that the 'lock on' button is not selected before plugging the saw back in. Keep the cable well away from the cutting line.

Before starting a cut, check that the saw blades path is clear along the entire cutting line. Don't force the blade; if you do the cut will wander off line, and you may snap the blade. Always remove the blade when you have finished using the saw.

With circular saws, make sure the workpiece is secure and that the blade won't cut through anything underneath it. Never remove the blade guard. Always hold the saw with both hands, so your hands are always behind the cutting line, and keep the cable safely out of harms way.

When running the saw as a bench saw, always use a push stick to guide the work past the blade. If the saw blade seems to be binding in the cut, use a slim wedge behind the saw to keep the cut open. Don't put the saw down with the motor locked on, and always unplug it before changing blades or carrying out any other adjustments. Remove the blade when you've finished using the saw.

### Power sanders

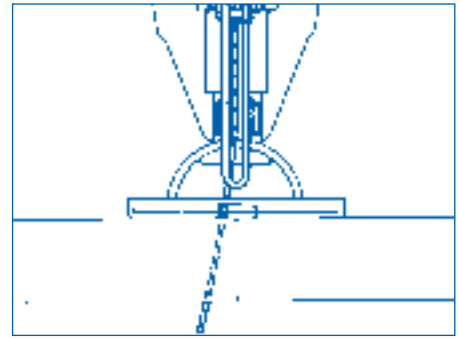
Power sanders are altogether less dangerous to use than power saws, although they can badly abrade the skin of a carelessly-placed hand. Their biggest problem is the amount of fine dust they create, especially when sanding surfaces such as plaster or MDF. If possible, always use a machine with a dust extraction facility, either fitted with a dust collection bag or connected to a vacuum cleaner. Before starting work, make sure that the sanding sheet or pad is correctly fitted to the sanders baseplate, and that it is secure.

### Angle grinders

Angle grinders need using with great care. Ensure that you are holding the tool with both hands before switching on and feeding the cutting disc into the work. If you start the motor up with the disc in contact with the work, the tool will snatch violently. Make sure too that the workpiece is securely held. Always check that you have fitted the correct disc for the job in hand, and that it is securely mounted. Buy discs with a reputable brand name; cheap unbranded discs have been known to break up in use, with potentially serious results for the user and anyone nearby. Always wear safety goggles, a face mask and stout gloves when using an angle grinder, especially when cutting metal when the grinder will produce showers of hot sparks.

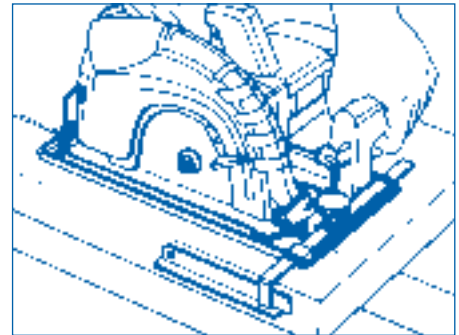
### Avoiding secondary dangers

Apart from the danger of injury from a carelessly-used power tool, you may also be at risk because of what you are doing with it. For example, if you are drilling a hole in a wall, you might drill through a hidden power cable. And it's easy to damage underfloor cables or pipework if you're using a power saw to cut through floorboards so you can lift them for access to the floor void. It's therefore vital to check for their presence first using a pipe and cable detector. The other danger arises if you are working out of doors. Although power tools are all double-insulated, it is a wise safety precaution to plug the tool into a residual current device - either in a special RCD plug or adaptor, or in an RCD socket outlet.



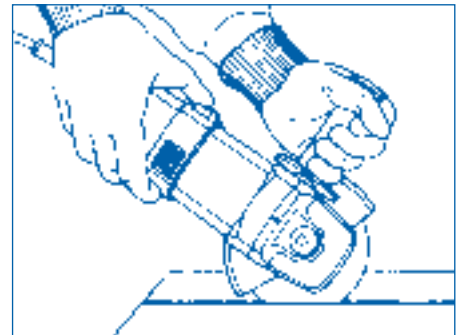
### Using jigsaws

Don't force a jigsaw blade, or it may wander off line and create an inaccurate angled cut.



### Using circular saws

Always make sure that the blade guard is in position before starting a cut with a circular saw.



### Using angle grinders

Always hold an angle grinder with both hands, and wear stout gloves especially when cutting metal.

## PROBLEM SOLVER

[P] It's difficult to gauge how deep a hole drilled in a wall is.	allowing cuts to be made in line with the front edge of the saw body.
[S] Improvise a depth indicator by wrapping some masking tape round the drill bit at a distance from the drill tip that matches the hole depth required.	[P] Rip-sawing narrow pieces of wood is difficult with a circular saw, which wobbles from side to side.
[P] When using a jigsaw to cut wood, there is always a degree of splintering along the cutting line.	[S] Place a second piece of wood the same size as the workpiece alongside it to give a wider support for the saw baseplate.
[S] Since jigsaws (and circular saws) cut on the upstroke, some splintering is inevitable. Make sure the saw blade is sharp and select one with a fine cut if this is essential. Lastly, mark up the work on the rear face so any splintering affects that and not the 'best' surface.	[P] When using an angle grinder to cut paving slabs accurately to size, the depth of cut is inadequate to cut right through the slab.
[P] A jigsaw is ideal for cutting the tongues off floorboards so they can be lifted, but the design of the saw prevents the blade from running right up to the skirting board.	[S] Mark the cutting line on both faces of the slab, and cut along the line on the face of the slab. Then turn it over to repeat the cut on the reverse side.
[S] Fit a flush-cutting blade to the saw. This is much wider than a standard blade,	

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